

What is claimed

- 1- A method for detecting and tracking a plurality of moving tagged objects or personnel, and for authenticating said plurality of tagged objects or personnel and transmitting said detected tagged object and or personnel information. Detecting means the detection of a plurality of objects' movement by the use of sensors. Tagged object or personnel means a plurality of objects and/or persons carrying a tag with a unique identification code. Authentication means for a reader/comparator the identification of said objects or persons carrying uniquely coded tags, by communicating with an interrogation signal(s) with said tags, and comparing said sensor movement detection signal and a transmitting means to transmit said sensor detection and or said tag read identification information.
- 2- A method defined in claim 1 wherein said tagged objects or personnel movement detection and authentication system, comprising of:
  - A tag with a unique code carried on an object(s) or person(s) used for identification of said object(s) or person(s).
  - A scanner panel equipped with at least a pair of optical human body heat and or motion-sensing detectors installed on said scanner panel apart from each other to transmit and receive optical and or ultrasonic beams through a predetermined area. Said object or personnel movement through said beams, interrupts said transmitting and receiving beam signal(s).
  - A reader is incorporated within said scanner panel, for interrogating and identifying said detected objects or personnel uniquely coded tags. Said reader upon interrogating said tag, transmitting said interrogated tag identification.
  - A comparator CPU for receiving said first and second sensor interruption detection signal, and for receiving said reader interrogated tag information, and for determining said passing tagged objects or personnel directional movement, and to transmit said identification information relating to said object and or personnel, with said object or personnel direction movement information, to a computer interface.
- 3- A method defined in claim 2 wherein said tag is an RFID and or a bar-code tag and said reader is an RFID reader equipped with an antenna and or a bar-code reader.
- 4 – A method defined in claim 2 wherein said comparator CPU upon receiving said sensor detection signal, said comparator CPU signaling said reader to transmit and interrogation signal(s) to read said tag(s).
- 5- A method defined in claim 2 wherein said first detection indicating a moving mass passed through said comparator first sensor detection zone. Said reader interrogation is for reading said moving object or personnel carrying tag(s). Second detection indicating said moving mass pass through said comparator second sensor detection zone. Said first and second sensor detection signal, indicating said mass directional movement.

- 6- A method defined in claim 2 wherein said comparator CPU utilizes an electronic counter, indicating total number of objects and or personnel passing through said reader/scanner, said reader/comparator electronic counter tally indicating separately the total number of passing objects or personnel with or without identification tag.
- 7- A method defined in claim 2 wherein said comparator CPU additionally is connected to a buzzer and or a speaker, said comparator CPU upon detecting movement of objects and or personnel, located in front or passing through said reader scanner, said Buzzer and or speaker produce's verbal or audible signals.
- 8- A method defined in claim 7 wherein said comparator CPU upon detecting movement of objects or personnel without receiving tag read data, said comparator CPU producing verbal or audible alarm signal(s) through said buzzer or speaker, and or transmitting said alarm condition information to a computer interface.
- 9- A method defined in claim 7 wherein said comparator CPU receiving tag read signal without object or personnel movement detection signals, said comparator CPU initiating a verbal and or audible alarm signal through said buzzer or speaker, and or transmitting said alarm condition information to a computer interface.
- 10- A method defined in claim 7 wherein said comparator CPU upon detecting movement of object or personnel without receiving read tag RFID signal, said buzzer or speaker producing a verbal or audible signal. If said movement detection contains read signal, said comparator CPU buzzer or speaker produces a second verbal or audible signal.
- 11- A method defined in claim 2 wherein said reader/comparator is connected to an RF transmitter, or a transceiver (Modem) to transmit said object detection movement and or read tag data information to a computer interface unit.
- 12- Method defined in claim 2 wherein said reader/comparator is connected to a computer through a hard wire connection.
- 13- Method Defined in claim 11 wherein said RF transceiver or modem is connected to a GPS receiver unit, said transceiver or modem unit is transmitting said object or personnel movement detection and or said tag read information along with said reader/scanner location information to a computer interface or Web server.
- 14- Method defined in claim 2 wherein said computer interface or web server containing alphanumeric or photographic information relating to said tagged

objects or personnel. Said computer interface upon receiving particular read tag information, displaying said alphanumeric or photographic information relating to said particular read object or personnel into said computer monitor.

- 15-Method defined in claim 14 wherein said computer interface or web server is programmed with, each one of plurality of personnel ID tags with plurality of matching object tags. Said computer interface upon receiving a particular personnel tag and personnel carrying tagged object scanned information, said received personnel and object tag's information is compared within said computer data base. If said particular personnel and particular object tag(s) is not of a match to said computer data base information. Said computer interface signaling the operator of said computer with an audio and or visual alarm signal.
- 16-Method defined in claim 2 wherein said reader/comparator and the computer interface unit is communicating at time interval with a supervisory data communication to ascertain proper operation of said reader/scanner.
- 17-Method defined in claim 2 wherein said reader/scanner panel, is equipped with built-in motion sensors, to detect intrusion or tempering within said panel. Said motion sensor transmits intrusion detection signal to a built-in buzzer or to a computer interface. Said intrusion signal is transmitted to said computer interface by means of a hard wire connection, or by a built in RF transmitter/transceiver and or a GPS/modem
- 18-Method defined in claim 17 wherein said panel motion detectors are infrared, ultrasonic, or microwave detectors protecting the interior of said panel with an invisible shield.
- 19-Method defined in claim 17 wherein said panel sensors additionally is equipped with sensors mounted on the back and the bottom of said panel, for detection of unauthorized removal or relocation of said panel.
- 20- Method defined in claim 2 wherein said scanner panel is powered by a battery.
- 21-Method defined in claim 2 wherein said scanner panel is powered by an external power supply, said scanner panel additionally is equipped with a built-in battery back up circuitry. Disconnect of said external power supply causes said reader/scanner to transmit a unique coded signal to a computer interface unit and or sound the built in buzzer.
- 22- Method defined in claim 2 wherein said reader/scanner is additionally equipped with a metal detector circuitry.
- 23- Method defined in Claim 2 wherein said reader/scanner panel additionally is equipped with an explosive detection circuitry.

24- Method defined in claim 2 wherein said reader/scanner is a portal scanner. Said portal scanner is installed in a fix position and or used in mobile applications.

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